EPA Response to Hurricane Harvey

CARL EDLUND

DIRECTOR, SUPERFUND DIVISION

REGION VI

7026098

UNIFIED COMMAND

RESPONSE OBJECTIVES

- Maximize the protection of public, health, and safety.
- Identify affected drinking water and wastewater systems in each area, evaluate the systems to determine their operational status and facilitate system contact with Federal, State, and Local agencies (provide technical assistance).
- Conduct wide area assessment to identify orphaned containers equal to or greater than 5 gallons, potential or actual discharges from vessels and/or facilities, and document the most effective means for recovery or mitigation in accordance with Natural Disaster Operations Workgroup and the approved Unified Command Vessel/Pollution Removal protocols.
- Prioritize, monitor, mitigate and/or recover identified pollution targets.
- Assess DHS critical infrastructure and RMP/FRP facilities for damage and immediate/ongoing releases.

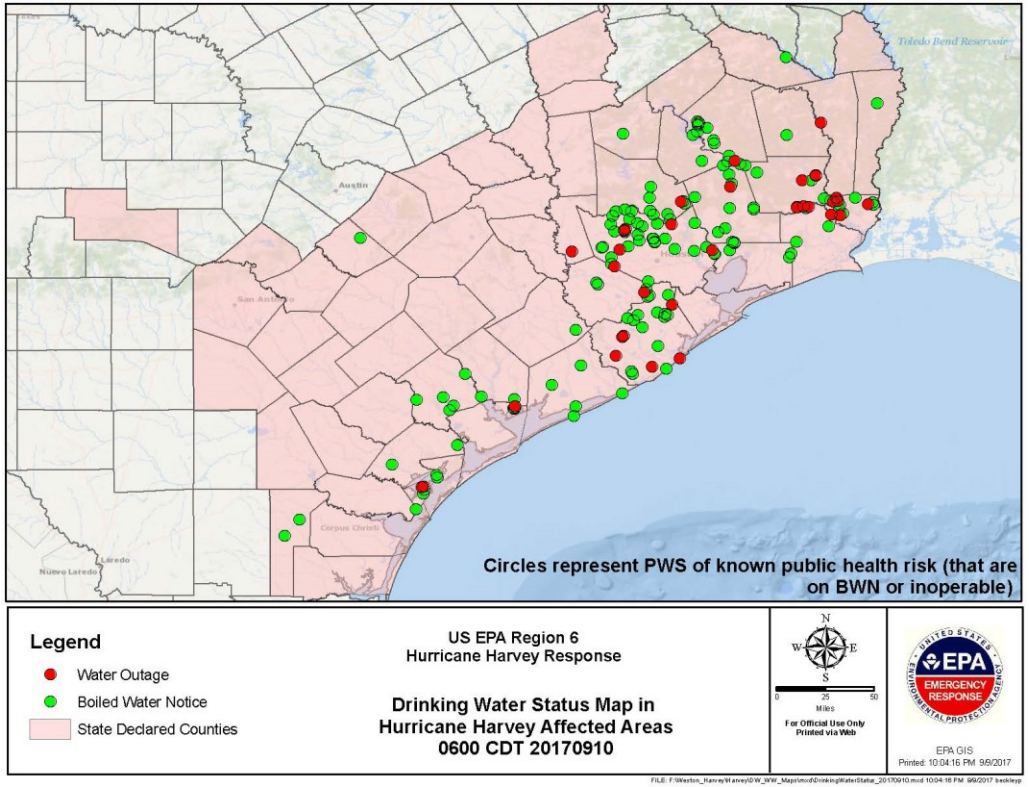
RESPONSE OBJECTIVES

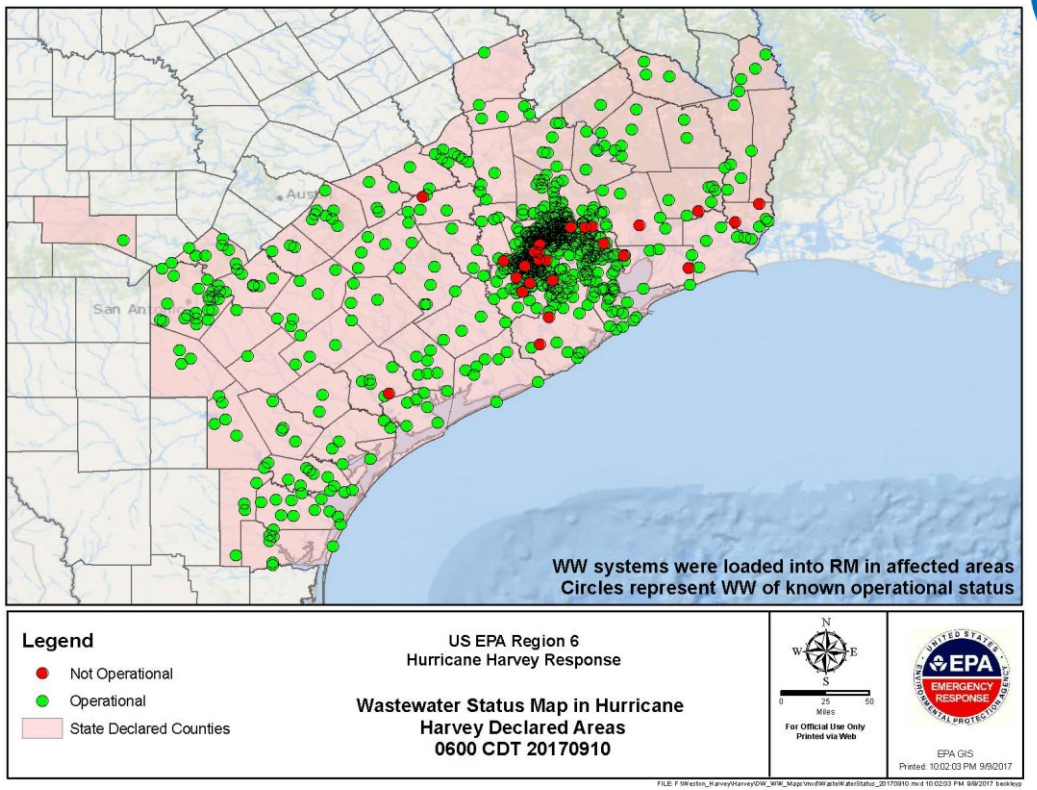
- Establish and maintain a common operating picture (COP).
- Identify and maximize protection of environmentally sensitive areas and threatened species.
- Manage a coordinated interagency response effort that reflects the composition of the Unified Command.
- Establish an IMT that can meet the initial and long-term challenges required for incident mitigation.
- Inform the public, stakeholders, and the media of response activities.
- Ensure appropriate financial accounting practices are adhered to.
- Establish a vessel recovery strategy.
- Establish a strong interagency partnership with public and private organizations to determine ownership and disposition of targets.

Unified Command Mobile Command Post

Command & General Staff Meeting

DW/WW Systems in Partnership with TCEQ





Drinking Water and Wastewater Assessments (September 8, 2017)		
Assessment Types	Daily Assessments	Total Assessments
On-Site DW Assessments	53	347
On-Site WW Assessments	26	237
Phone DW Assessments	331	5006
Phone WW Assessments	82	3026

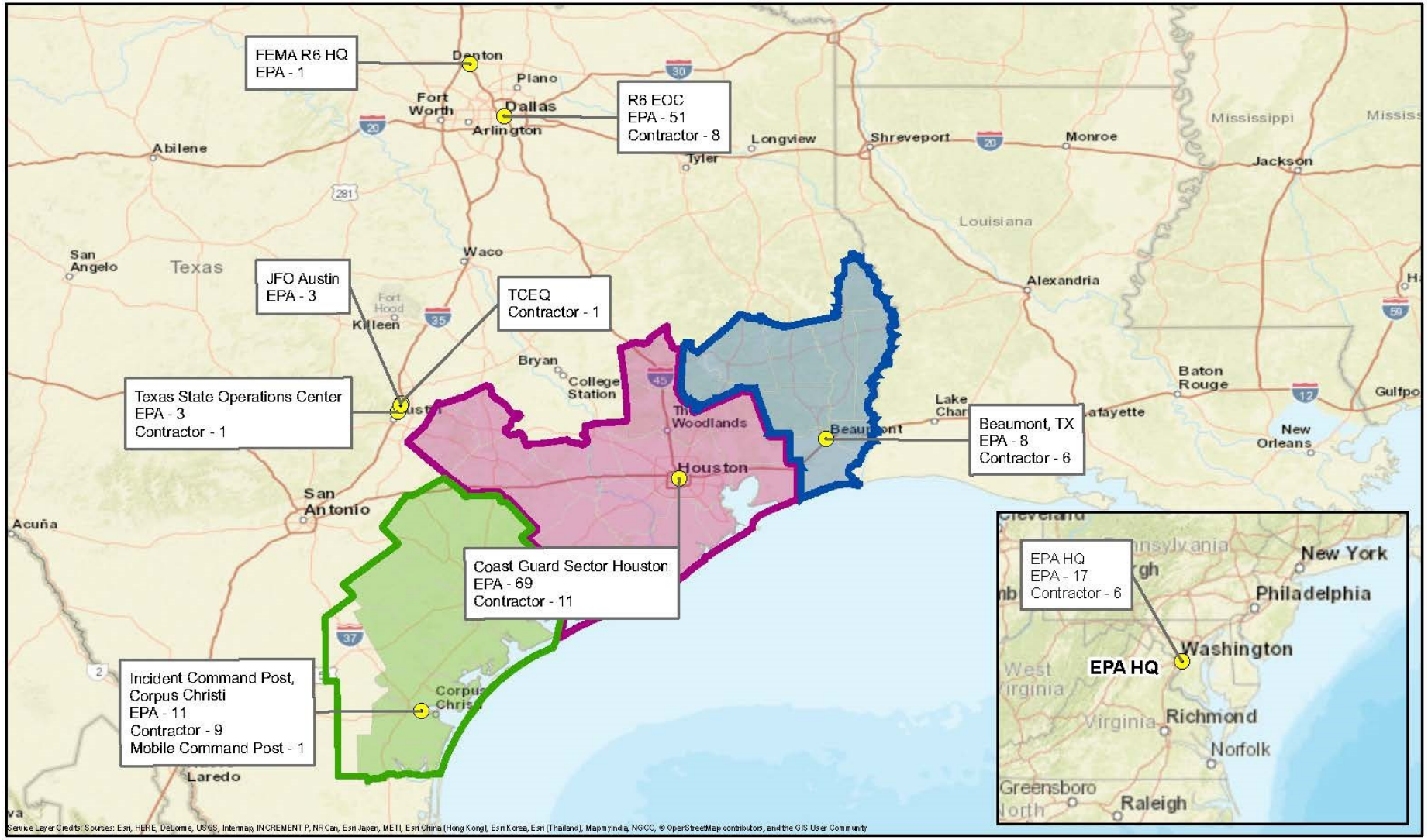
Accomplishments to Date

- 120 Hazard Evaluations completed and closed
- 221 spills/discharge investigation completed
- 113 orphan containers recovered
- 295 drinking water assessments completed
- 193 waste water assessments completed
- Daily aerial over-flights for air monitoring
- 7 fuel waivers signed, 7th waiver covers 38 states
- 4 No Action Assurance letters signed
- Ground support air monitoring
- 43 NPL site evaluations completed
- EPA fully integrated with TCEQ and TGLO in Unified Command

Projected Work

- Mobile lab air monitoring in Port Arthur and Houston area this week
- Additional support to DW/WW teams
- Completion of NPL site sampling as soon as 9/11/17
- Private well testing
- Public outreach support for flood water hazards
- Container recovery
- Chemical and oil response as needed
- ASPECT
- Debris – EPA involvement uncertain at this time
  - Can perform collection of HHW, E-Goods, and White Goods if tasked

EPA Resources



FUNDING

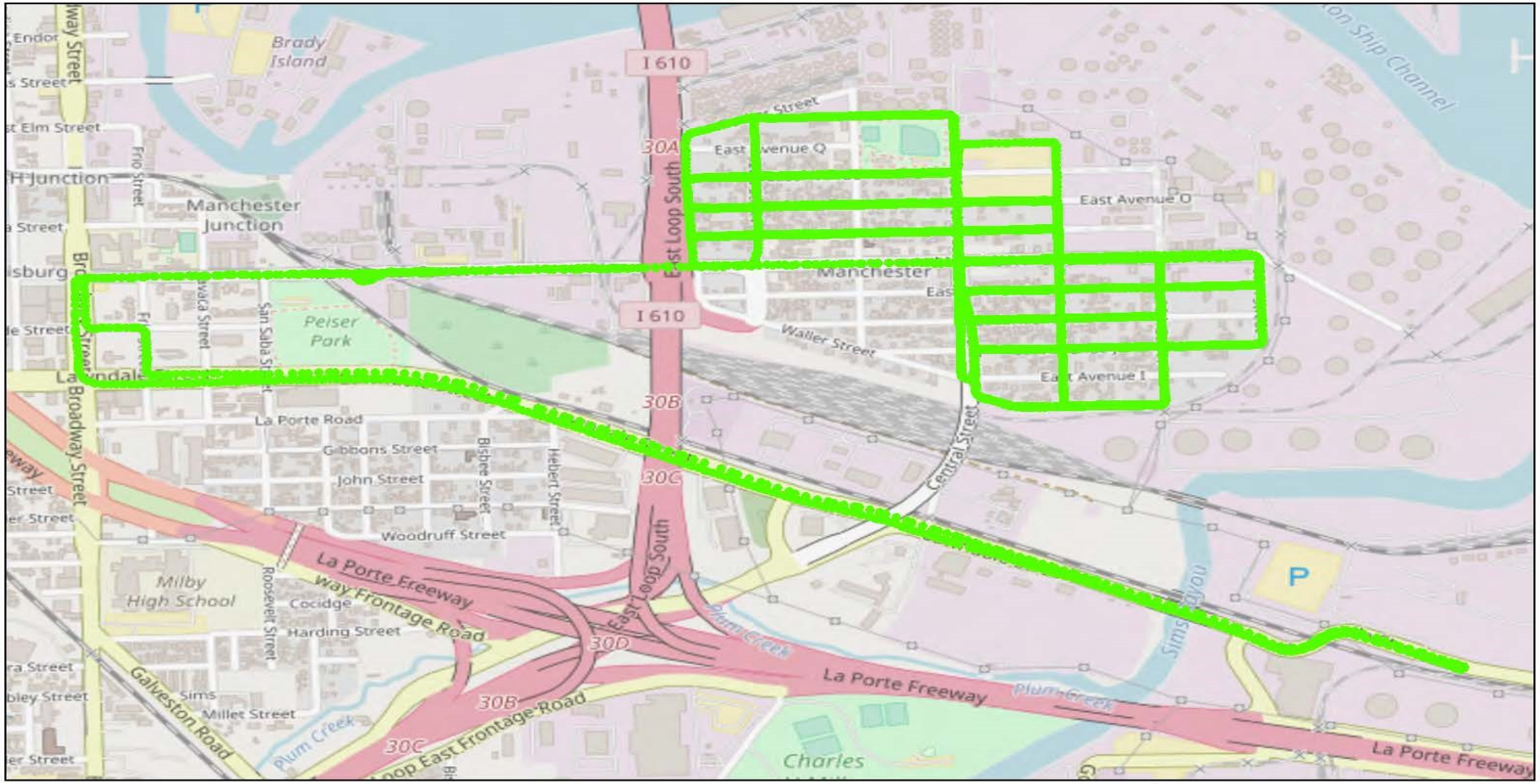
September 8, 2017, UPDATED 1300 hours

Funding Sources	Funding Ceiling	Funding Ceiling Less Indirect	Spent to Date	Remaining Balance	Daily Burn Rate	Days Remaining
Non Mission Assignment	N/A		$64,200	$0		
MA 4332DR-TX-EPA-01	$275,000	$242,741	$30,512	$212,229	$2,848	74.52
MA 4332DR-TX-EPA-03	$10,092,000	$8,908,127	$5,972,473	$2,935,653	$323,516	9.07
Totals:	$10,367,000	$9,150,868	$6,067,185	$3,147,882		

Indirect costs represent the money the Cincinnati Shared Service Center takes off the top to manage the Mission Assignments

TAGA Activities

- Refinery monitoring
- Sensitive community monitoring
- Chemical manufacturing corridor monitoring



Substance	CAS #	Short-term AMCV Health (ppb)
1,1-dichloroethylene	75-35-4	180
benzene	71-43-2	180
m/p-xylene	179601-23-1	1700
o-xylene	95-47-6	1700
tetrachloroethylene	127-18-4	1000
toluene	108-88-3	4000
trichloroethylene	79-01-6	100

Legend

● No Readings Above Benchmarks

USA EPA REGION 6
TAGA Runs on 20170905

What's an AMCV?
AMCV is a collective term used to describe chemical-specific air concentrations used to evaluate air monitoring data that are set to protect human health and welfare. Short-term AMCVs are based on data concerning acute health effects. **AMCVs** may contain health-based Reference Values (ReVs) and health- and welfare-based ESL values. AMCVs are screening levels used in TCEQ's evaluation of ambient air monitoring data to assess the potential for measured concentrations of specific chemicals to cause health or welfare effects. Health-based AMCVs are safe levels at which exposure is unlikely to result in adverse health effects. ESLs are screening levels used in the TCEQ's air permitting process to establish maximum emission rates that are written into enforceable air permits. Health-based **ESLs** are set 70 percent lower than the safe level, or AMCV. This additional buffer allows TCEQ to take into account exposure to chemicals from multiple sources in air permit reviews.

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Miles

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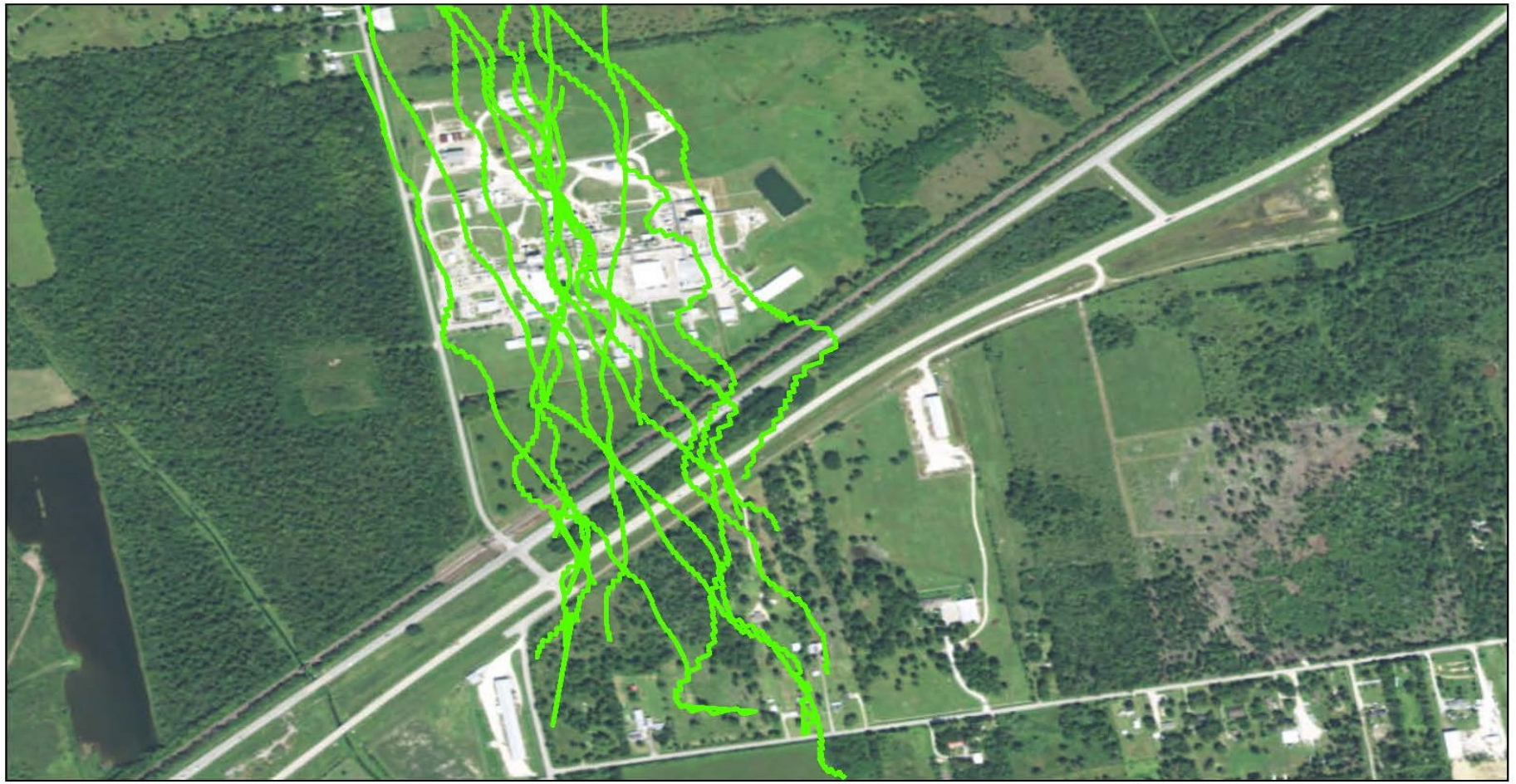
TAGA Product

ASPECT Activities

- DHS and DOE requested monitoring
- Pipelines
- Refineries
- Release assessment of chemical and oil storage facilities
- Release response support at the Arkema incident
- Aerial reconnaissance imagery to identify releases and orphan containers

ASPECT Flights



Chemical Compounds	Short-term AMCV (ppm)
1,1-dichloroethane	1.0
1-butene	27
acetone	11
dichlorodifluoromethane	10
ethyl acetate	4
ethylene	500
isobutane	33
methyl ethyl ketone	20
methylene chloride	3.4
n-butyl acetate	7.4
n-propyl acetate	2
propylene	Simple Asphyxiant
vinyl chloride	27

Legend

No Readings Above Benchmarks

USA EPA REGION 6
Flight 13 ASPECT

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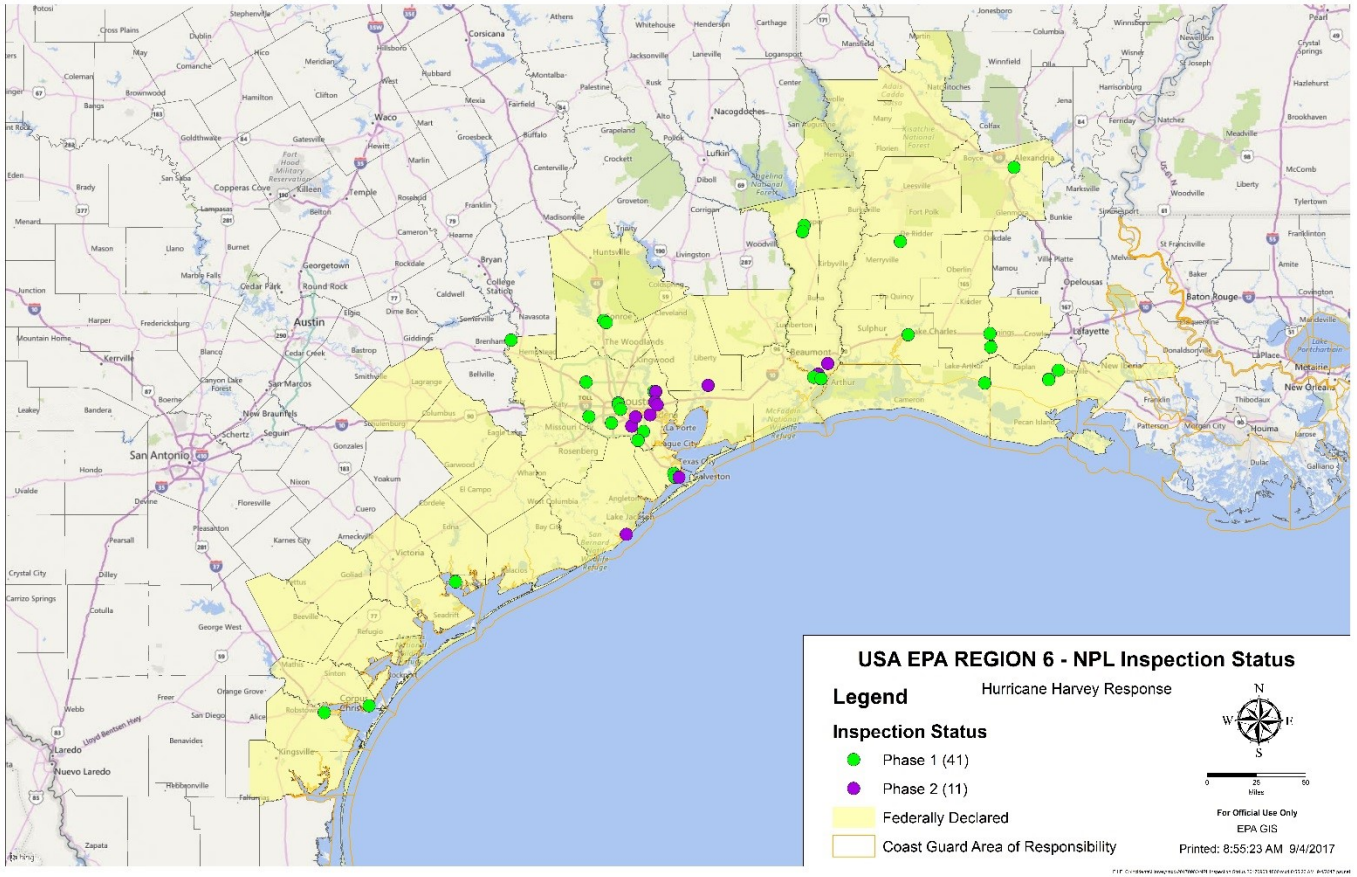
PHILIS Activities

- On- Site Release assessment of analytical services
- Staging area sampling services
- Superfund site assessment analytical services

NPL Site Inspections

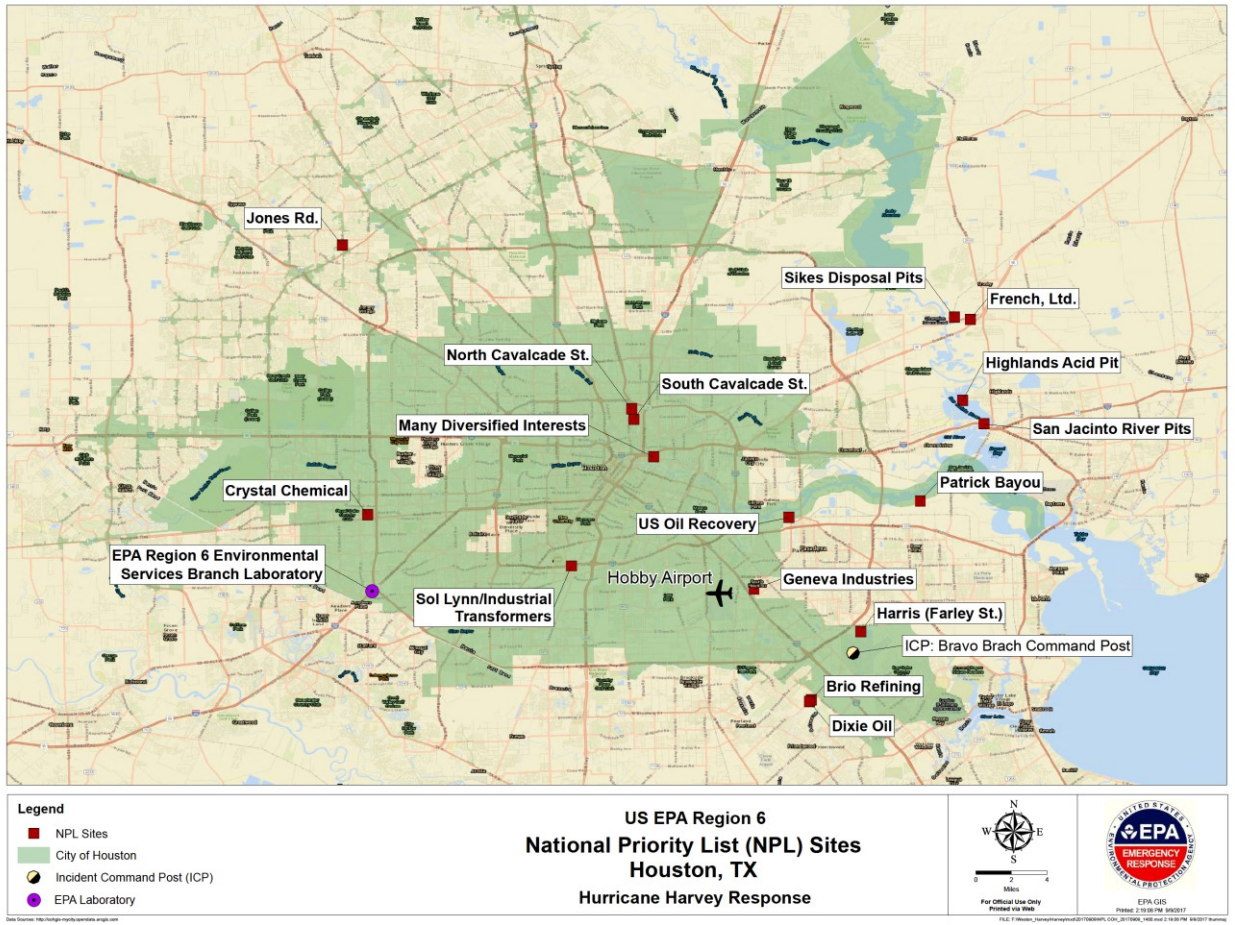


All 43 Federal Superfund NPL Sites in the affected area have been assessed. Of these, 41 sites have been cleared, and two sites (San Jacinto Pits and US Oil Recovery) require additional follow-up.

On September 5, EPA initiated sampling at NPL sites in Texas. EPA will sample sites to confirm no releases.

Sampling will be completed by September 11 and results will be available soon.

Houston Visit Itinerary



NIC & OMB Houston Visit
September 11, 2017
9:30 am – 5:00 pm

Depart Dallas Love Field – 7:30 am, SW Flight #3
Arrive Houston Hobby – 8:35 am

Houston Lab – 10625 Fallstone Road, 77099

Bravo Branch Command Post – 13411 Hillard Street, 77034

San Jacinto Waste Pits – W. Bank of San Jacinto River, N. of HWY 10, Channelview, 77530